

REMARKS

This Amendment is being timely filed in response to the outstanding Office Action.

Applicant respectfully requests the Examiner to reconsider the present application in view of the foregoing amendments to the claims.

Status of the Claims

In the present Reply, claim 1 has been amended. Also, claim 3 was previously canceled without prejudice or disclaimer of the subject matter contained therein. Further, claims 5-6 are objected to but have indicated allowable subject matter (see page 2 of the Office Action). Thus, claims 1, 2 and 4-12 are pending in the present application.

No new matter has been added by way of the amendment to claim 1 because this amendment is supported by the present specification in paragraph [0027] (pages 13-14).

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicant respectfully requests that the Examiner withdraw all rejections and allow the currently pending claims.

Issues under 35 U.S.C. § 103(a)

Claims 1-4 and 7-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nesbitt '509 (U.S. Patent No. 6,663,509). Applicant respectfully traverses, and reconsideration and withdrawal of this rejection are respectfully requested. Also, Applicant's previous remarks

are rendered moot in view of the new rejection. Overall, Applicant does not concede that a *prima facie* case of obviousness has been established.

The Claimed Invention and Its Unexpected Advantages

The golf ball of the present invention includes the following features:

[i] the multi-piece golf ball has a center, intermediate layer on the center, and a cover over the intermediate layer;

[ii] the core has a deformation amount of 3.0 to 6.0 mm (when applying from an initial load of 98 N to a final load of 1275 N);

[iii] the intermediate layer employs both the elongation (penetration) range of 9 - 20 mm and a flexural stiffness range of 300 - 2000 MPa;

[iv] the intermediate layer material is selected from the group consisting of polyurethane-based thermoplastic elastomer, polyamide-based thermoplastic elastomer, polycarbonate resin, polyacetal resin, and a modified compound thereof; and

[v] the cover is formed from a thermoplastic resin.

Applicant initially notes that Nesbitt '609 fails to disclose features [ii] and [iii] above, and thus a *prima facie* case of obviousness is not established. Also, Nesbitt '609 fails to provide any motivation or reasonable expectation of success for one of ordinary skill in the art to refer to Nesbitt '609, and then modify the disclosure to achieve what is instantly claimed (e.g., including feature [ii]). Thus, there is no *prima facie* case of obviousness for these reasons as well.

Distinctions over Nesbitt '609

In the present invention, the intermediate layer is formed from one material having an elongation of 9 to 20 mm when applying the maximum load in penetration and impact fatigue tests (feature [iii] shown above). With regard to the technical meaning of limiting the elongation (when applying the maximum load in penetration and impact fatigue tests) for the present invention, Applicant respectfully refers the Examiner to paragraphs [0002] to [0009] and [0016] (see in particular paragraph [0016] at pages 7-8) of the specification of the present application.

Paragraph [0016] (as amended herein) is reproduced for the Examiner's convenience:

[0016] There have been golf balls obtained by using material having high flexural modulus or high hardness for the intermediate layer as prior art. It is possible in some degree to improve the balance of performances of the golf ball by using a hard intermediate layer in combination with a soft center and a soft cover. However, since the intermediate layer is hard when compared with the center and cover, stress is concentrated on the intermediate layer, and durability of the intermediate layer is degraded. Particularly, when using a harder intermediate layer than the golf ball of Japanese Patent Kokai Publication No. 239068/1997 as described above, the durability is greatly degraded. Therefore, in the present invention, the durability is sufficiently improved by forming the intermediate layer from a material that is hard and has large elongation. In the present invention, penetration mode, which is not tensile mode, is selected in an impact test, because it is considered that the penetration mode is similar to impact phenomenon when hitting the golf ball by a middle iron club to a driver.

With regard to the method used to test elongation, Applicant respectfully refers the Examiner to paragraph [0062] at page 31 and Fig. 1 of the present specification (see in particular page 31, lines 14-18). Applicant further notes that Table 4 (page 32) containing the Inventive Examples and Table 5 (page 33) containing the Comparative Examples depict the elongation properties for the tested golf balls. Applicant further notes that the intermediate layer should have the above values of the elongation and flexural stiffness (or feature [iii]) to achieve such properties as better launch angle, spin and flight distance of the golf ball. Therefore, in the

present invention, and as instantly claimed, the intermediate layer is formed from one material having an elongation of 9 to 20 mm when applying the maximum load in penetration and impact fatigue tests, as well as a flexural stiffness of 300 to 2,000 MPa. The cited Nesbitt '509 reference fails to disclose features [ii] and [iii] as instantly claimed, as well as the advantages as achieved by the present invention.

In particular, the cited Nesbitt et al. '509 reference fails to disclose the elongation when applying the maximum load in penetration and impact fatigue tests (or feature [iii]). In addition, Nesbitt '509 fails to disclose feature [ii] of the present invention. Instead, the Office Action merely cites various parts of Nesbitt '509 without properly accounting for these claimed features. Thus, a *prima facie* case of obviousness has not been established since a proper case of obviousness requires satisfaction of three factors: (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations; (2) whether or not the prior art would have taught, motivated, or suggested to those of ordinary skill in the art that they should make the claimed invention (or practice the invention in case of a claimed method or process); and (3) whether the prior art establishes that in making the claimed invention (or practicing the invention in case of a claimed method or process), there would have been a reasonable expectation of success. See *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination."). Because there is no disclosure of all claimed features, which is one of the

requirements noted above, this rejection has been overcome. Withdrawal of this rejection is thus requested.

Applicant also submits that feature [iii] is not disclosed by Nesbitt '509. However, the Office Action, the Examiner states that the claimed elongation is an obvious feature since the materials "are similar". Applicant disagrees since similar materials does not mean the same materials as instantly claimed. Thus, the elongation as claimed has not been sufficiently accounted for in the outstanding Office Action.

Applicant further submits that it is not *prima facie* obvious to modify a reference unless the reference(s) suggests an advantage to be gained from the modification. See *In re Sernaker*, 217 USPQ 1, 6 (Fed. Cir. 1983). That suggestion and advantage thereof in Nesbitt '509 are missing, wherein there is no recognition of accounting for features [ii] and [iii] as instantly claimed. Thus, Applicant respectfully submits that the requisite motivation is lacking and this rejection is overcome for this additional reason. *In re Vaeck; supra*.

Applicant also traverses the conclusion that "One of ordinary skill in the art would have varied the elongation for the desired performance features". First, the cited reference must suggest the desirability of the modification. *In re Brouwer*, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). Here, Nesbitt '509 does not make such a statement. Second, Applicant respectfully submits that any variance in elongation can be done with any of the layers in a golf ball, and due to a multitude of factors. In other words, much experimentation is needed and there is a certain level of unpredictability in achieving such properties. However, "Obviousness requires one of ordinary skill in the art have a reasonable expectation of success as to the invention—'obvious to try' and 'absolute predictability' are incorrect standards." *Velander v. Garner*, 68, USPQ2d

1769, 1784 (Fed. Cir. 2003) (citing *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673 (Fed. Cir. 1988)). Thus, the requisite reasonable expectation of success is lacking since the statement of "One of ordinary skill in the art would have varied the elongation for the desired performance features" equals an improper "obvious to try" rationale or an impermissible invitation to experiment. Reconsideration and withdrawal of this rejection are thus requested.

Thus, Applicant respectfully submits that none of the requirements for a *prima facie* case of obviousness have been satisfied. Withdrawal of this rejection is respectfully requested.

Unexpected Results for the Claimed Invention

Applicant respectfully submits that the present invention has achieved unexpected results, whereby such results rebut any asserted *prima facie* case of obviousness (whether based on Nesbitt 509 or any other reference or combinations thereof). See *In re Corkill*, 711 F.2d 1496, 226 USPQ 1005 (Fed. Cir. 1985); see also *In re Papesch*, 315 F.2d 381, 137 USP 43 (CCPA 1963); *In re Wiechert*, 370 F.2d 927, 152 USPQ 247 (CCPA 1967). As stated in M.P.E.P. § 2144.09 (see section entitled "*Prima Facie* Case Rebuttable By Evidence of Superior or Unexpected Results"), any rejection under 35 U.S.C. § 103(a) may be rebutted by a sufficient showing of unexpected results for the present invention.

As mentioned above, Table 4 (page 32) containing the Inventive Examples and Table 5 (page 33) containing the Comparative Examples in the present specification depict the elongation properties for the tested golf balls. Pages 33-34 of the present specification also discuss the comparative properties between the tested golf balls. In particular, the present specification discusses how Comparative Examples 1 and 2, in comparison to the present invention, achieve

inferior elongation in the penetration and impact fatigue tests. Thus, Comparative Examples 1 and 2 achieve deformation loss, smaller launch angles, large spin and less flight distance (see page 33, lines 1-11). Comparative Example 3 also achieves inferior results in that the flexural stiffness of the intermediate layer is low, which leads to a smaller launch angle, large amount of spin, and a reduced flight distance (page 33, lines 12-15). In contrast, the present invention (e.g., Inventive Examples 1-4) unexpectedly improves in launch angle, spin and flight distance versus the Comparative Examples. Such unexpected results sufficiently rebuts any rejection made under § 103(a). Applicant also notes that nonobviousness of a broader claimed range can be supported by evidence based on unexpected results from testing a narrower range if one of ordinary skill in the art would be able to determine a trend in the exemplified data which allow the artisan to reasonably extend the probative value thereof. *See In re Kollman*, 595 F.2d 48, 201 USPQ 193 (CCPA 1979).

Accordingly, Applicant respectfully submits that this rejection under § 103(a) is overcome because evidence of unexpected results is in the present specification, and it is improper to not consider such evidence of patentability for the present invention. *See In re Soni*, 54 F.3d 746, 34 USPQ2d 1684 (Fed. Cir. 1995) (error not to consider evidence in the specification); M.P.E.P. § 2144.08(II)(B). Reconsideration and withdrawal of this rejection under § 103(a) are respectfully requested.

Conclusion

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present


application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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